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Department of Science and Art
of the Committee of Council on Education.

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PREFACE.

Origin of Educational Collections.

In 1854 a special loan exhibition of educational appliances, English and Foreign, was held in St. Martin's Hall, Long Acre, under the direction of the Society of Arts. At its close many of the exhibitors of books, school furniture, diagrams, &c. left their contributions at the disposal of the Society, by which they were subsequently handed over to the Science and Art Department of the Committee of Council on Education, and in 1857, when the Museum at South Kensington was formed, a portion of the temporary iron buildings was appropriated for the display of this Collection; and publishers and manufacturers were invited to add to it by loans, an invitation which was very widely responded to. For ten years the books, school furniture, elementary scientific apparatus, drawing models, and other educational appliances were displayed as one collection, and under the title of the Educational Museum attained considerable reputation both at home and abroad.

School furniture, fittings, &c.

In 1867 portions of the iron buildings were removed preparatory to the erection of new permanent additions to the Art Museum, and space was found for the school furniture, apparatus, &c. first in the corridors and outbuildings of the Museum, and afterwards in the galleries to the south of the Horticultural Gardens, where they remained till, in 1888, other more pressing demands on the space made it necessary to discontinue the exhibition of all except the scientific apparatus, which has been combined with the Collection of Scientific Apparatus for Teaching and Research, formed after the special loan exhibition of Scientific Apparatus held at South Kensington in 1876. (*See* 36th Report of the Department, p. xxx.)

Educational Library.

Meanwhile the elementary school books, &c. received from the Society of Arts had been retained in the Museum, and a reading room had been provided for the use of students. The collection was largely augmented by gifts from publishers and from the various exhibitions at home and abroad, and a supply of more advanced text books and works of reference was provided to meet the demands of readers, chiefly students connected with the Science and Art Schools of the Department. To these were added reports and other works bearing on the history and progress of education at home and abroad, together with numerous educational periodicals both English and Foreign. A library of general literature which had been formed for official use of the inspectors, &c. at the central office of the Committee of Council on Education was in 1876 removed here,* and in 1882, after the re-organisation of the science teaching of the Department, it was determined to transfer to South Kensington from the Library of the Museum of Practical Geology in Jermyn Street for the use of the professors and students of the Normal School of Science all the books not required by the staff of the Geological Survey, or by the Mining Class.

Revision of Educational Library in 1883.

In 1883 a committee of advice and reference which had lately been appointed to examine and report on the educational collections of the South Kensington Museum found that by the accumulations of the past twenty-five years the Library had become larger and more comprehensive than was at first anticipated, and that it then contained more than 45,000 works (not including duplicates), many of course being small and unimportant. The reports and recommendations of this committee were considered by the Department, and the following Minute, dated the 19th July 1883, was the result as regarded the Library:—

> My Lords have before them the reports on the Educational Museum of the Committee of Advice and Reference who were appointed by Minute of the 9th May 1882.
>
> In accordance with the recommendations therein contained, and with those of the Departmental Officers to whom such reports have been

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* Books from this collection are referred to by C.C.E.L., No. .

referred, My Lords have decided to make the following arrangements in regard to the above-mentioned Libraries :—

> 1. The books relating to Science in the Educational Library to be amalgamated with the books brought from Jermyn Street, and formed into a Science Library, special facilities being afforded to the Professors of the Normal School to have out on loan such as they require. The books on Art to be added to the Art Library.
>
> 2. School and text books, English and Foreign, to be formed into a separate collection and retained with the Educational apparatus for reference and inspection, but not to be used by students as a reading library.
>
> 3. Books relating to the history, science, and art of education, English and Foreign; reports and memoirs relating to public instruction at home and abroad; educational periodicals of all countries; reports, calendars, examination papers, &c. of public educational institutions to be formed into a separate section by themselves.
>
> 4. Additions by purchase or otherwise to be only made in future of books falling under one or other of the preceding heads.
>
> 5. The books under sections 1, 3, and 4, to be housed for the present in the existing Educational Library rooms, and to be open to the public as at present, so long as there is room after providing for the students of the Normal School of Science.
>
> 6. No additions to be made to the other classes of books in the Educational Library; but those that are already in the possession of the Department to be retained as an Appendix to the Science and Educational Library in the present rooms, and to be open to use by readers therein, as at present.

Science Library.

Since that time the additions to the Library have mainly been confined to books on science, selected with special reference to the requirements of the professors and students of the Normal School, now the Royal College of Science. About 9,750 volumes have been received from Jermyn Street, a large proportion of these being Journals and Transactions of Scientific Societies, English and Foreign. At the close of 1884 the present Reading Room was opened, being the fifth room used for this purpose since 1857.

The following Catalogue, which deals with the Science Library only,* is really a tenth edition (with numerous additions, and some omissions) of the science portion of the "Catalogue of the Educational Division of the South Kensington Museum," which was first issued in 1857, and of which the ninth edition appeared in 1876. With some modifications the classification originally adopted in that Catalogue is still adhered to.

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* A catalogue of books relating to the history, science, and art of education, &c. is in preparation.

Some of the more elementary school books have been omitted from the Catalogue, and are kept with the collection of school and text books directed by the above Minute to be available for inspection only.

South Kensington Museum,
March 1891.

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OF THE
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PART I.

MATHEMATICS.

ARITHMETICAL TABLES OF MONEY, WEIGHTS, AND MEASURES.

Abbott, W. J. Manual of the Decimal System for the Use of Jewellers, Pawnbrokers, Silversmiths, &c.; also a Ready Reckoner. (The Weights and Measures' Act, 1878.) post 8vo. cloth. J. & R. Maxwell [1879].

Agriculturist's Calculator. *See Works on* AGRICULTURE.

Arman, A. Complete Ready Reckoner for the Admeasurement of Land, with a Table showing the Price of Work, from 2*s*. 6*d*. to 1*l*. per acre. (Weale's Series.) 12mo. cloth, stiff. J. S. Virtue, 1862.

Browne, W. H., LL.D. Money, Weights, and Measures of the Chief Commercial Nations in the World, with the British Equivalents. 12mo. cloth, stiff. E. Stanford, 1864.

Chambers's Commercial Tables; consisting of Reckoning, Interest, Annuity, &c. New edition. 12mo. bound. W. & R. Chambers.

Chisholm, H. W. (Warden of the Standards.) On the Science of Weighing and Measuring, and Standards of Measure and Weight. crown 8vo. cloth. (Nature Series.) Macmillan & Co., 1877.

——— On Balances (Science Lectures at South Kensington). *See Works on* PHYSICS (*General Treatises*).

Clapham, J. The Carrier's Improved Ready Reckoner for cwts., qrs., lbs., from 2*s*. 6*d*. to 140*s*. per ton. oblong post 8vo. cloth. London, 1859.

Degranges, E. Tables ou Calculs tout faits d'Intérêts. *See Works on* BOOK-KEEPING.

Dowling, C. H. A Series of Metric Tables, in which the British Standard Measures and Weights are compared with those of the Metric System at present in use on the Continent. *See Works on the* METRIC SYSTEM (*below*).

Dowsing, W. Timber Merchant's and Builder's Companion. Tables of the Weight and Measurement of Deals, &c., with Prices. 2nd edition. post 8vo. cloth. C. Lockwood & Co.

Dunham, Robert Clark. Decimal Key for simplifying all ordinary Arithmetical Operations. folio. half bound. London, 1866.

East Indian Ready Reckoner; a Series of Tables showing the Cost of any Number of Articles in Indian Currency. Including Numbers answering to fixed Indian Weights and Measures. By C. D. royal 8vo. cloth. Smith, Elder, & Co., 1864.

Festing, A. M. Tables for the Conversion of Sterling into Dollars and Cents, and *vice versâ*. 2 parts in one volume. fcp. folio. cloth. Desbarats, Ottawa, 1867.

Gumersall, T. B. Tables of Discount or Simple Interest, from 5 to 2½ per cent.; with Tables of Brokerage or Commission. 9th edition. 8vo. cloth. Effingham Wilson.

Haviland, J. The Scientific Adviser; containing Tables of Specific Gravities of all Substances; their Superficial and Solid Contents; Land Measuring; together with a Computation of the Differences between Old and New Weights and Measures; also Prices of the Work of Millwrights, and other Artificers; with Tables of Interest, Discount, &c. 5th edition. 8vo. boards. London, 1826.

E 61668. 750.—8/90. Wt. 21006. E. & S.

Hrabák, J. Gemeinnütziges Mathematisch-Technisches Tabellenwerk, insbesondere für das Metrische und Englische, Oesterreichische und Preussische Maas- und Gewichts-System. 2nd edition. royal 8vo. sewed. Teubner, Leipzig, 1876.

Inwood, W. Tables for the Purchasing of Estates, Annuities, &c. 17th edition, with Additions, by Mons. Fedor Thoman. 12mo. cloth. C. Lockwood & Co., 1859.

Kelly, Dr. P. The Universal Cambist and Commercial Instructor. 2nd edition. 2 vols. 4to. calf. London, 1826.

Kupffer, A. T. Travaux de la Commission pour fixer les Mesures et les Poids de l'Empire de Russie. 2 vols. With Atlas. 4to. half calf. St. Petersburg, 1841.

McCulloh, R. S. A Manual containing Tables to be used by the Revenue Officers of the United States. small 12mo. bound. Washington, 1849.

Metric System, Works on the. *See next Section.*

Millers' (The), Merchants' and Farmers' Ready Reckoner, with the Approximate Values of Millstones and Millwork, &c. (Weale's Series.) 12mo. cloth, stiff. J. S. Virtue, 1861.

Richardson, W. Packing Case Tables, showing the Number of Superficial Feet in Boxes, &c. oblong post 4to. cloth, stiff. C. Lockwood & Co., 1864.

Tate, W. The Modern Cambist; a Manual of Foreign Exchanges; with Tables of Foreign Weights and Measures, and their Equivalents in English and French. 9th edition, brought down to the Present Time. 8vo. cloth. Effingham Wilson, 1858.

Thoman, F. Theory of Compound Interest and Annuities, with Logarithmic Tables. 12mo. cloth. C. Lockwood & Co., 1859.

Warren, Rev. I. Table and Formula Book. sq. 24mo. sewed. Longmans & Co., 1889.

Wheeler, J. Appraiser, Auctioneer, House Agent, and House Broker's Pocket Assistant for Valuation, &c. 2nd edition. royal 32mo. cloth. C. Lockwood & Co.

Wood's Discount Tables, calculated from 1*d.* to 200*l.* at from ¼ to 90 per cent. 24mo. cloth. Whittaker & Co., 1851.

Woolhouse, W. S. B. Measures, Weights, and Moneys of all Nations, &c. 12mo. cloth. J. Weale, 1856.

—— —— 6th edition. 12mo. cloth. C. Lockwood & Co., 1881.

METRIC SYSTEM OF WEIGHTS, MEASURES, AND COINAGE.

American Metrological Society. Proceedings. *See* **Transactions**—New York.

Bonn, Prof. Great Britain's New Proposed Decimal Albert System of Weights, Measures, and Coins, compared with the French Metric System, &c. 8vo. sewed. London, 1869.

Bowring, Sir J. The Decimal System in Numbers, Coins, and Accounts. crown 8vo. cloth. N. Cooke, 1854.

—— —— post 8vo. cloth. E. Stanford, 1872.

British Decimal System (A) of Weights and Measures. Described by Abacus. 8vo. sewed. G. Graham, Edinburgh, 1872.

Bureau International des Poids et Mesures. Travaux et Mémoires. *See* **Transactions**—Paris.

Dowling, C. H. A Series of Metric Tables, in which the British Standard Measures and Weights are compared with those of the Metric System at present in use on the Continent. 8vo. cloth. C. Lockwood & Co., 1864.

—— Handbook to accompany the Synoptic Table of Measures and Weights of the Metric System. By J. Yates. post 8vo. cloth, limp. W. & A. K. Johnston, 1864.

Dunham, R. C. Decimal Key for Simplifying all ordinary Arithmetical Operations. *See* Arithmetical Tables, &c.

International Association for obtaining a Uniform System of Measures, Weights, and Coins (British Branch), &c., Various Pamphlets published by the. In one vol. 8vo. half roan. 1855–66.

Jackson, L. d'A. Modern Metrology; a Manual of the Metrical Units and Systems of the Present Century. post 8vo. cloth. C. Lockwood & Co., 1882.

Levi, Leone. The Theory and Practice of the Metric System of Weights and Measures. fcp. 8vo. sewed. 1871.

—— —— 2nd edition. fcp. 8vo. cloth. Griffith and Farran, 1871.

Rickard, W. Manual of the Metric System. fcp. 8vo. sewed. G. Philip & Son, 1872.

Ross, W. S. Text-Book of the Metric System and Decimal Coinage. New edition. fcp. 8vo. sewed. T. Laurie

Saigey, M. Traité de Métrologie, Ancienne et Moderne, suivi d'un précis de Chronologie et des Signes Numériques, &c. *See Works on* ARITHMETIC (*Foreign*).

Spain. Comision Internacional del Metro. *See* **Transactions**—MADRID : *Instituto Geográfico.*

Taylor, H. Decimal System as applied to the Coinage and Weights and Measures of Great Britain. 12mo. cloth. Groombridge & Sons, 1851.

For other Works on the Metric System and Decimal Coinage, see in following Section :—

Browne, W. A. Arithmetical Examples.

Bryce, J. The Arithmetic of Decimals.

Colenso, Bishop. Arithmetic for Schools.

Kavanagh, J. W. Arithmetic.

(*In the Science Galleries of this Museum will be found a Collection of Weights, Measures, Coins, with Diagrams, illustrating the different Systems adopted in various parts of the World, &c.*)

ARITHMETIC.

ENGLISH TREATISES.

Alingham, W. New Treatise of Arithmetick. 12mo. calf. London, 1705.

Ars bene Numerandi, or a Small Tract of Arithmetick, &c. By T. R. (T. Richards ?) 18mo. calf. London, 1702.

Ayres, J. Arithmetick Made Easie, with a Treatise on Book-keeping by C. Snell. Revised by E. Hatton. 17th edition. 18mo. bound. T. Norris, London, 1726.

Babbage's Calculating Engines. Being a Collection of Papers relating to them ; their History and Construction. 4to. cloth. E. & F. N. Spon, 1889.

[*Babbage's Difference and Analytical Engines are in the Science Collections of this Museum.*]

Baker, Humph. The Well-Spring of the Sciences ; teaching the perfect Work and Practice of Arithmetic. 18mo. bound. S. Brewster, London, 1657.

Bayley, W. H. Hand-Book of the Slide Rule, showing its Applicability to I.—Arithmetic (including Interest and Annuities). II.—Mensuration (Superficial and Solid, including Land Surveying). New edition. 12mo. cloth. G. Bell & Sons, 1876.

Bridges, Noah. Lux Mercatoria; Arithmetic, Natural and Decimal. royal 18mo. calf. T. Johnson, London, 1661.

Browne, W. A., LL.D. Arithmetical Examples for Military and Civil Service ; a Complete Treatise on Arithmetic, consisting of Questions given at Military and Civil Service Examinations, &c. ; with an Account of Money, Weights, and Measures, and a Sketch of the Metric System. 12mo. cloth. 1864.

——— Arithmetical Questions on the 8th Civil Service Report, with Answers and Solutions. 12mo. stitched. 1864.

——— Civil Service Tests in Arithmetic. fcp. 8vo. cloth.

——— Army Tests in Arithmetic ; with Answers. 12mo. cloth, limp. E. Stanford, 1871.

Bryce, J. The Arithmetic of Decimals, adapted to a Decimal Coinage. 2nd edition. post 8vo. cloth. A. & C. Black, Edinburgh, 1860.

Byrne, Oliver. Dual Arithmetic. A new Art. New issue, with a complete Analysis. 8vo. cloth. 1864.

——— ——— Part 2. The Descending Branch of the "Art" and the "Science" of Dual Arithmetic. 8vo. cloth. 1867.

——— The Young Dual Arithmetician, or Dual Arithmetic. A new Art, designed for Elementary Instruction, &c. 12mo. cloth. Bell & Daldy, 1866.

Christie, J. A. The Constructive Arithmetic ; developing a new method of teaching the Science and Art of Computation. With 8,000 Examples for practice. 12mo. cloth. Virtue Brothers & Co., 1865.

Cocker's Arithmetick ; being a plain and familiar Method, suitable to the meanest Capacity, for the full Understanding of that incomparable Art. Perused and published by John Hawkins. 45th edition, carefully corrected and amended by George Fisher. 12mo. in roan case. (Imperfect.) London, n.d.

——— ——— Perused and published by John Hawkins. 12mo. calf. Printed by R. Holt, 1688.

——— ——— By John Hawkins, and George Fisher. 49th edition. 12mo. bound. London, 1738.

——— Decimal Arithmetic. By J. Hawkins. 4th edition. 12mo. bound. R. Wellington, London, 1713.

Colenso, Bishop. Arithmetic for Schools, with a Chapter on Decimal Coinage. New edition. 12mo. boards. 1853.

——— ——— Key to, by S. Maynard. 3rd edition. 12mo. boards. 1854.

——— ——— New edition, revised, with Notes and Examination Papers. 12mo. half calf. Longmans & Co., 1864.

Colenso, Bishop. Arithmetic for Schools, with Chapter on Decimal Coinage. Key, adapted to the revised edit. of 1864. By the Rev. J. Hunter, M.A. 12mo. half calf. Longmans & Co., 1864.

Cornwell and **Fitch's** Science of Arithmetic. 4th edition. 12mo. cloth. 1858.

——— ——— 15th edition. 12mo. cloth. Simpkin & Co., 1874.

De Morgan, A. Arithmetical Books and Authors, from the Invention of Printing to the Present Time. post 8vo. cloth. Walton & Maberly, 1847.

——— Elements of Arithmetic. post 8vo. cloth. Walton & Maberly, 1857.

——— ——— 6th edition. 8vo. cloth. E. Stanford, 1876.

Dilworth, T. The Schoolmaster's Assistant; being a Compendium of Arithmetic, both Practical and Theoretical. 14th edition. 12mo. bound. London, 1767.

——— ——— 17th edition. 8vo. bound. 1772.

——— ——— 22nd edition. 12mo. bound. 1784.

——— ——— 23rd edition. 12mo. sheep. (*Brooke Collection.*) London, 1787.

Donald, J. Commercial Arithmetic; comprising Proportion and its application to Interest, Exchange, Stocks, Profit and Loss, &c., according to a New Method, &c. crown 8vo. cloth. Simpkin & Co.

Evers, H. Arithmetic in Theory and Practice. With Answers. post 8vo. cloth. W. Collins, Sons, & Co., 1876.

Galbraith, Rev. J. A., and **Haughton,** Rev. S. Manual of Arithmetic. fcp. 8vo. cloth. Longmans & Co., 1855.

——— ——— New edition. fcp. 8vo. cloth. Cassell, Petter, & Galpin, 1868.

Girdlestone, Rev. W. H. Arithmetic, Theoretical and Practical. crown 8vo. cloth. Rivingtons, 1867.

——— ——— 2nd edition, revised and enlarged. crown 8vo. half morocco.

——— ——— School edition. fcp. 8vo. cloth. Rivingtons, 1870.

Goyen, P. Higher Arithmetic and Elementary Mensuration. post 8vo. cloth. Macmillan & Co., 1888.

Gray, J. G., and **Lawson,** G. The Elements of Graphical Arithmetic and Graphical Statics. *See Works on* MECHANICS.

Hatton, E. The Merchant's Magazine; or, Tradesman's Treasury. 5th edition. post 4to. old calf. London, 1707.

Hatton, Ed. An Intire System of Arithmetic; or Arithmetic in all its parts. small 4to. calf. London, 1721.

Hill, J. Arithmetick, both in Theory and Practice. With Preface by H. Ditton. post 8vo. sheep. (No title.) (*Brooke Collection.*) 1712.

——— Arithmetick, both in the Theory and Practice, Made Plain and Easie. 2nd edition; with the addition of Algebraical Questions. post 8vo. old calf. London, 1716.

——— ——— 15th edition. 12mo. bound. Edinburgh, 1780.

Hind, Rev. John. The Principles and Practice of Arithmetic, comprising the Nature and Use of Logarithms, with the Computations employed by Artificers, Gaugers, and Land Surveyors, with a New Appendix of Miscellaneous Questions. 12mo. boards.

——— ——— Key to; with an Appendix, consisting of Questions for Examination in all the Rules of Arithmetic. 12mo. boards. Deighton, Bell, & Co., Cambridge, 1856.

Hipsley, W. Equational Arithmetic applied to Questions of Interest, Life Assurance, &c. 2nd edition. 12mo. cloth, stiff. J. Weale, 1854.

——— ——— Part 2. 12mo. cloth stiff. J. S. Virtue, 1858.

Hoare, C. The Slide Rule and How to Use it. With a Slide Rule in tuck of cover. 4th edition. 12mo. cloth, stiff. (Weale's Series.) C. Lockwood & Co., 1881.

Hodder, J. Decimal Arithmetick. 18mo. old calf. London, 1668.

——— Arithmetick; or, that necessary Art Made Most Easie. 20th edition, revised by H. Mose. 18mo. bound. London, 1697.

Hunter, Rev. J. The Art of Solving Problems in Higher Arithmetic. post 8vo. cloth. 1884.

——— ——— Key to. post 8vo. cloth. Longmans & Co., 1884.

Hutton, C. The Schoolmaster's Guide, or a Complete System of Practical Arithmetic and Book-keeping. 3rd edition. 12mo. bound. Newcastle-upon-Tyne, 1771.

——— A Complete Treatise on Practical Arithmetic and Book-keeping. 6th edition. 12mo. bound. London, 1781.

——— Arithmetic and Book-keeping. Edited by Ingram and Trotter. New edition. 12mo. bound. Oliver & Boyd, Edinburgh, 1857.

Johnston, R. Civil Service Arithmetic, containing 1,300 Questions proposed by the Civil Service Commissioners, with Solutions of some of the most difficult. 12mo. cloth. Longmans & Co., 1863.

——— ——— 14th edition. 12mo. cloth. 1879.

——— ——— A Key to. 12mo. cloth. 1879.

——— ——— 15th edition; with Examination Papers given in 1879, their Answers, &c. Longmans & Co., 1880.

Kavanagh, J. W. Arithmetic, its Principles and Practice. 5th edition, with an Appendix on Coins and Coinage, Decimal Money, &c. 12mo. cloth. C. Dolman, 1857.

Lardner, Dr. A Treatise on Arithmetic. post 8vo. cloth. Longmans & Co.

Leybourn, W. Arithmetical Recreations; or Enchiridion of Arithmetical Questions, &c. 24mo calf. London, 1667.

——— Arithmetick: Vulgar, Decimal, Instrumental, Algebraical. 5th edition. 12mo. bound. London, 1684.

Lupton, W. M. Arithmetic. 2nd edition. 12mo. sewed. Longmans & Co., 1867.

——— ——— Key to. By C. R. Lupton. 12mo. cloth. Longmans & Co., 1877.

Merrifield, C. W. Technical Arithmetic and Mensuration. post 8vo. cloth. (Text-Books of Science.) Longmans & Co., 1872.

——— ——— 2nd edition. post 8vo. cloth. 1873.

——— ——— New edition. post 8vo. cloth. 1882.

——— ——— Key to, by Rev. J. Hunter. post 8vo. cloth. Longmans & Co., 1873.

Morland, Sir S. The Description and Use of Two Arithmetick Instruments. Together with a Short Treatise, Explaining and Demonstrating the Ordinary Operations of Arithmetick. As likewise, a Perpetual Almanack, and several Useful Tables. fcp. 8vo. calf. London, 1673.

[*The Calculating Machine adapted to Trigonometrical Computations, and Constructed by Sir Samuel Morland in* 1664, *is in the Science Collections of this Museum.*]

Munn, D. The Theory of Arithmetic. post 8vo. cloth. W. Blackwood & Sons, 1871.

Nesbit, A. A Practical Treatise on Arithmetic. Part I. 4th edition. 12mo. bound. 1850.

——— ——— Key to. 12mo. bound.

——— ——— Part II. 12mo. bound.

——— ——— Key to. 12mo. bound. Longmans & Co., 1846.

O'Gorman, D. Intuitive Calculations. 25th edition, corrected and enlarged by J. R. Young. 12mo. cloth, stiff. (Weale's Series.) C. Lockwood & Co., 1879.

Pedley, S. Examples in Arithmetic. post 8vo. cloth. Macmillan & Co., 1879.

Piper, T. W. Advanced Arithmetic for Schools and Colleges. crown 8vo. cloth. G. Philip & Son, 1874.

Potts, R. Elementary Arithmetic, with brief Notices of its History. Sections 1 to 12. In one vol. 8vo. half calf. National Society's Depository, 1876.

Record, R., M.D. Arithmetick; or the Ground of Arts, &c. Afterwards augmented by John Dee, and since enlarged, with a third part of Rules of Practice, &c. by John Mellis, corrected by Ro. Hartwell. 12mo. bound. London, 1673.

Rickard, W. The Miner's Manual of Arithmetic and Surveying. *See Works on* GEOLOGY.

"**Routledge**" Engineers' Improved Slide Rule, Instructions for Using the. fcp. 8vo. sewed. Birmingham, 1867.

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Vienna. — Embryologisches Institut der K. K. Universität.
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CLASS I.—MAMMALIA.

1. Order I. Bimana. Man. [262.]
2. Skeletons of Bimana and Quadrumana. 1, Man; 2, Chimpanzee; 3, Orang-outan. [263.]
3. Order II. Quadrumana. 1, Chimpanzee (*troglodytes niger*); 2, Mandrill, or Variegated Baboon (*cynocephalus maimon*); 3, Howler (*mycetes ursinus*); 4, Silky Monkey (*colobus guereza*). [264.]
4. Order III. Carnaria. Sub-order I. Cheiroptera. 1, Fox-bat (*pteropus ruficollis*); 2, 3, Leaf-nosed Bat (*vespertillio phyllos*). [265.]
5. Sub-order II. Insectivora. 1, Bornean Pen-tail (*tupaia ptilocercus*); 2, Tanrec (*centetes ecaudatus*); 3, Watershrew (*crossopus fodiens*); 4, Mole (*talpa europæa*); 5, Hedgehog (*erinaceus europœus*). [266.]
6. Sub-order III. Carnivora. 1, Lion (*felis leo*); 2, Tiger (*felis tigris*); 3, Jaguar (*leopardus onca*); 4, Wah (*dilurus fulgens*). [267.]
7. Sub-order III. Carnivora. 1, Polar Bear (*thalass-arctos maritimus*); 2, Wolf (*canis lupus*); 3, Fox (*canis vulpes*); 4, Alpine Mastiff. [268.]
8. Order IV. Marsupialia. 1, Merian's Opossum (*didelphis dorsigera*); 2, Virginian Opossum (*didelphus virginiana*); 3, Kangaroo (*macropus*). [269.]
9. Order V. Rodentia. 1, Flying Squirrel (*pteromys volucella*); 2, African Jumping-hare (*helamys caffer*); 3, Porcupine (*hystrix cristata*); 4, Beaver (*castor fiber*); 5, Hare (*lepus timidus*); 6, Rabbit (*lepus cuniculus*). [270.]
10. Order VI. Edentata. 1, Duck-billed Platypus (*ornithorhynchus paradoxus*); 2, Sloth (*bradypus torquatus*); 3, Ant-eater (*myrmecophaga jubata*); 4, Armadillo (*dasypus sexcinctus*). [271.]
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12. Order VII. Pachydermata. Sub-order Solidungula. 1, Zebra (*equus Burchellii*); 2, Quagga (*asinus quagga*); 3, Ass (*equus asinus*); 4, Horse (*equus caballus*). [273.]

13. Order VIII. Ruminantia. 1, Springbok, female (*antelope euchore*); 2, Red Deer, male (*cervus elaphus*); 3, Bison (*bos Americanus*); 4, Buffalo (*bos bubalus*); 5, Bull (*bos taurus*). [274.]

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14. Order VIII. Ruminantia. Giraffe (*cameleopardalis giraffa*). [275.]

15. Order IX. Cetacea. 1, Whale (*balæna mysticetus*); 2, Sperm Whale (*cætodon macrocephalus*); 3, African Manatus, or Sea-cow (*manatus senegalensis*); 4, Dolphin (*delphinus delphis*). [276.]

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——— L'Hygiène et l'Éducation dans les Internats, Lycées, Collèges, Pensionnats, Maisons d'Education, Écoles Normales, Écoles Spéciales, Universités, &c. post 8vo. half roan. Hachette & Co., 1877.

——— Le Surmenage Intellectuel et les Exercices Physiques. (*With Works on* TEACHING, FRENCH, &c.)

Ribot, Th. Diseases of Memory. post 8vo. cloth. (International Scientific Series.) K. Paul, Trench, & Co., 1882.

Rice, E. Domestic Economy. Parts 1–3. fcp. 8vo. cloth, limp.

——— Text-Book of Domestic Economy. fcp. 8vo. cloth. Blackie & Son.

Richardson, Dr. B. W. On Health and Occupation. fcp. 8vo. cloth. (Manuals of Health.)
Christian Knowledge Society

——— Health and Life. post 8vo. cloth.
Daldy, Isbister, & Co., 1878.

——— Drink and Strong Drink. fcp. 8vo. cloth.
W. Collins, Sons, & Co., 1882.

Richardson, W. The Chemical Principles of the Metallic Arts, with an Account of the principal Diseases incidental to the different Artificers, &c. *See Works on* CHEMISTRY.

Rijkens, R. G. Handleiding voor Ligchaams-oefeningen. 8vo. stiff wrapper. Groningen, 1843.

Riofrey, Dr. A. M. Treatise on Physical Education, especially adapted to Young Ladies. 2nd edition, enlarged, with Plates. 8vo. cloth.
Longmans & Co., 1838.

Ritche, R. Treatise on Ventilation, Natural and Artificial. 8vo. cloth.
C. Lockwood & Co., 1862.

Robins, E. C. Technical School and College Building: being a Treatise on the Design and Construction of Applied Science and Art Buildings, and their suitable Fittings and Sanitation, &c. *With Works on* TEACHING, ENGLISH, &c.

Roland, G. An Introductory Course of Gymnastic Exercises. 2nd edition. royal 8vo. cloth. 1854.

——— An Introductory Course of Fencing. 2nd edition. royal 8vo. cloth. Oliver & Boyd.

Roland, J. The Amateur of Fencing. 8vo. boards. London, 1809.

Root, N. W. T. School Amusements. Rules for Military and Gymnastic Exercises; with Engravings. crown 8vo. cloth. Barnes & Burr, New York, 1860.

Ross, G. On the Ventilation of Schools, Hospitals, Law Courts, and other Public Buildings. 8vo. sewed. W. H. & L. Collingridge, 1874.

Roster, G. Il Pulviscolo Atmosferico ed i suoi Microrganismi. *See Works on* BOTANY (*Foreign*).

Roth, Dr. M. Movements or Exercises, according to Dr. Ling's System. 8vo. sewed. 1852.

——— A Letter to the Earl Granville on Gymnastics. 8vo. stitched. Groombridge & Sons, 1854.

Rumford's (Count) Complete Works: Economy of Fuel, Construction of Kitchen Fire-places and Utensils, various Processes of Cookery, Management of Fires in closed Fire-places, Food, Salubrity of Warm Rooms, Warm Bathing, Coffee, &c., &c. *See Works on* PHYSICS (*General Treatises*).

Salzmann, C. G. Gymnastics for Youth. With Plates. 8vo. half calf. London, 1800.

Sanitary Condition of the Labouring Population of Great Britain, Parliamentary Report on the. 8vo. cloth. London, 1842.

Sanitary Engineering. *See* WORKS ON ARCHITECTURE, &c.

Sanitary Institute of Great Britain, Report of the 3rd Congress, held at Croydon, October 1879; being Vol. 1 of the Transactions; and onwards. *See* **Transactions**—LONDON (CATALOGUE OF SCIENTIFIC PERIODICALS).

Schaible, Dr. C. H. First Help in Accidents; being a Surgical Guide, &c. 18mo. cloth. R. Hardwicke.

Schenström, R. Réflexions sur l'Éducation Physique et les Mouvements Corporels. 8vo. sewed. V. A. Delahaye, Paris, 1880.

Schmitz, P. Traité de Gymnastique élémentaire et raisonnée, à l'usage des Écoles Primaires. 2nd edition. post 8vo. sewed. 1870.

——— Traité de Gymnastique d'Application. post 8vo. sewed. Liége, 1871.

School of Popular Cookery. One Hundred and Forty Recipes, selected from various Authorities. 8vo. sewed. London International Exhibition, 1873.

Schreber, Dr. D. G. M. Kallipädie, oder Erziehung zur Schönheit. royal 8vo. cloth. Fleischer, Leipzig, 1858.

——— Illustrated Medical In-door Gymnastics; or a System of Medico-Hygienic Exercises. Translated from the German by Henry Skelton. royal 8vo. cloth. Williams & Norgate, 1856.

Science (The) of Food. A Text-Book specially adapted for those who are preparing for the Government and other Examinations in Domestic Economy. With Examination Questions. By L. M. C. 8vo. cloth. G. Bell & Sons, 1883.

Scoffern, Dr. J. Philosophy of Common Life, or the Science of Health. post 8vo. cloth. Ward & Lock, 1857.

——— Chemistry of Food. (Orr's Circle of the Sciences. Vol. 7.) *See Works on* PHYSICS (*General Treatises*).

Sewage Process, The A B C. 2nd edition. 8vo. sewed. E. Stock.

Sharples, C. H. Food and its Adulterations. 8vo. sewed. Greenall, Preston, 1879.

Shaw's Medical Remembrancer; or, Book of Emergencies, &c. 5th edition, rewritten, &c., by J. Hutchinson. 32mo. cloth, limp. J. Churchill & Sons, 1867.

Shipton, J. Pharmacopœia Bateana. In qua, Octingenta circiter Pharmaca, pleráque omnia è Praxi Georgii Batei excerpta, Ordine Alphabetico concisè exhibentur. Huic accessit Orthotonia Medicorum Observata: Annexa item est in Calce Tabula Posologica. small 12mo. calf. (*Brooke Collection.*) London, 1688.

Skater's (The) Pocket Companion. 32mo. half morocco. Dean & Munday.

Smith, Dr. Edw. Practical Dietary for Families, Schools, and the Labouring Classes. crown 8vo. boards. Walton & Maberly, 1864.

——— Foods. crown 8vo. cloth. (International Scientific Series.) 1873.

——— ——— 4th edition. post 8vo. cloth. (International Scientific Series.) H. S. King & Co., 1876.

Smith, R. Angus. Air and Rain. *See Works on* CHEMISTRY; *also* Local Government Board Publications *in present section.*

Smoke Preventing (Abatement) Appliances, Exhibition, International, of, 1881-2:

Descriptive Catalogue, Nov. 1881. 8vo. sewed. W. H. & L. Collingridge.

Bericht an das K. Sächsische Ministerium des Innern, in dessen Auftrage erstattet, von F. Siemens. 8vo. sewed. Springer, Berlin, 1882.

Smoke Abatement Committee, 1882, Report of the. With Reports of the Jurors of the Exhibition at South Kensington, and Reports of the Testing Engineer, to which are added the Official Reports on the Manchester Exhibition, &c. demy 4to. cloth.
Smith, Elder, & Co., 1883.

South, J. F. Household Surgery; or Hints on Emergencies. 4th edition, with a Chapter on Poisons by Dr. Gladstone. fcp. 8vo. cloth. J. Murray, 1859.

Soyer, A. The Pantropheon, or History of Food and its Preparation, from the Earliest Ages of the World. royal 8vo. cloth. Simpkin & Co., 1853.

Spiess, A. Die Lehre der Turnkunst. 4 vols. 8vo. cloth. Basel, 1840–46.

——— Turnbuch für Schulen. 2 vols. 8vo. cloth. Basel, 1847.

Statesman's Year-Book. *See* WORKS OF REFERENCE.

Statistical Abstract for the United Kingdom — British India — Colonies— Principal and other Foreign Countries. Current Number. 8vo. sewed.
H.M. Printers.
See also Statesman's Year-Book.

Statistical Congress. Papers on Statistical Methods, &c., read in the Sixth Section. By Dr. Guy, Messrs. R. Valpy, S. Brown, and J. Winter Jones. imp. 4to. sewed. 1860.

Statistical Society of London, Journal of the. *See* **Transactions**— LONDON (CATALOGUE OF SCIENTIFIC PERIODICALS).

Statistics, Vital, Works on. *See :—*
Census of Great Britain, 1831–1881.
Census (Tenth) of the United States, 1880.
Holland, G. C. The Vital Statistics of Sheffield.
Johnston's Statistical Atlas.
Neison, F. G. P. Contributions to Vital Statistics.
Walker, F.

Staub, A. Description de la Cité Ouvrière et des Institutions qui s'y rattachent de MM. Staub & Cie. à Kuchen, près Geislingen, en Würtemberg. Text. 4to. sewed. Atlas. oblong folio. boards.
Stuttgart, 1868.

Taylor, A. S. Manual of Medical Jurisprudence. 8th edition. fcp. 8vo. cloth.
J. Churchill & Sons, 1866.

Techow, Gustav. Manual of Gymnastic Exercises for the Use of Schools and at Home. 8vo. cloth. Melbourne, 1866.

Tegetmeier, W. B. A Manual of Domestic Economy. 4th edition. 12mo. cloth. Groombridge & Sons, 1858.

——— The Handbook of Household Management and Cookery, compiled at the request of the School Board for London. 2nd edition. fcp. 8vo. cloth.
Macmillan & Co., 1877.

Tobacco Question considered, by J. B. Budgett, M.D., 1857.—Death in the Pipe, by J. L. Milton, 1857. In 1vol. 8vo. half roan. G. Philip & Son, 1857.

Tomlinson, C. A Rudimentary Treatise on Warming and Ventilation. 12mo. cloth, stiff. J. Weale, 1850.

Traces du Magnétisme. 8vo. sewed. (*Brooke Collection.*) The Hague, 1784.

Training Schools of Cookery. (United States Circulars of the Bureau of Education, 1879.) *See* REPORTS ON EDUCATION—UNITED STATES.

Twickenham Economic Museum, Papers (3) on. 4to. stitched. (*With Works on* MUSEUMS.) Simpkin & Co.

Twining, T. Science for the People: a Memorandum on various Means of Propagating Scientific and Practical Knowledge among the Working Classes, &c. 8vo. cloth. C. Goodman, 1870.

——— Suggestions for Developing the Elements of the Science of Daily Life in the Primary Schools of the People, with the Aid of the "Science Made Easy" Course. 8vo. sewed.
Economic Museum, Twickenham, 1880.

——— Familiar Lessons on Food and Nutrition. Intended to serve as a Handbook to the Food Department of the Parkes Museum of Hygiene. Part 1. post 8vo. cloth. D. Bogue, 1881.

——— Science made Easy: Elements of Scientific Knowledge most required in Daily Life. *See Works on* PHYSICS— (*General Treatises*).

Tyndall, J. Essays on the Floating-Matter of the Air in relation to Putrefaction and Infection. *See Works on* BOTANY.

——— Fermentation and its Bearings on the Phenomena of Disease. *See Works on* CHEMISTRY.

Tyndall and **Pasteur.** Les Microbes Organisés; leur Rôle dans la Fermentation, la Putréfaction et la Contagion. *See Works on* BOTANY (*Foreign*).

Uffelmann, Dr. J. Darstellung des auf dem Gebiete der Oeffentlichen Gesundheitspflege in Ausserdeutschen Ländern, &c. 8vo. sewed.
G. Reimer, Berlin, 1878.

United States Commission of Fish and Fisheries, Reports, &c. *See Works on* FISHES.

United States Sanitary Commission. "Bulletin," Nos. 1 to 40. 3 vols., in one. royal 8vo. sewed.

——— ——— "Documents," Nos. 1 to 95. In 2 vols. roy. 8vo. sd. New York, 1866.

United States Statistical Atlas, by F. Walker. *See* Walker.

Useful Arts employed in the Production of Food and Clothing, and Construction of Dwelling-Houses. *See Works on* MANUFACTURES AND TRADES.

Vaccination Commission. First, Second and Third Reports of the Royal Commission on Vaccination; with Minutes of Evidence. 3 vols. fcp. folio. sewed. H.M. Printers, 1889–90.

Véron, E. Les Institutions Ouvrières de Mulhouse et des Environs. 8vo. sewed. Hachette & Co., 1866.

Victorian Year-Book. *See* WORKS OF REFERENCE.

Walford, C. The Insurance Cyclopædia. *See* WORKS OF REFERENCE.

Walker, F. Statistical Atlas of the United States, based on the results of the Ninth Census, 1870, with Contributions from many eminent Men of Science. large 4to. half bound. [Washington], 1874.

Wallace, M. S. Study and Work at the Kensington School for Cookery. 12mo. sewed. Mozley & Smith, 1877.

Wanklyn, J. A. Milk-Analysis: a Practical Treatise on the Examination of Milk and its Derivatives, Cream, Butter, and Cheese. post 8vo. cloth. 1874.

——— Tea, Coffee, and Cocoa: a Practical Treatise on the Analysis of Tea, Coffee, Cocoa, Chocolate, Maté (Paraguay Tea), &c. post 8vo. cloth. 1874.

Wanklyn, J. A., and **Chapman,** E. T. Water Analysis: a Practical Treatise on the Examination of Potable Water. 4th edition, rewritten by J. A. Wanklyn. post 8vo. cloth. Trübner & Co., 1876.

Ward, F. O. Moyen de créer des Sources Artificielles d'Eau pure pour Bruxelles et pour d'autres grandes Villes d'après le nouveau procédé Anglais. royal 8vo. sewed. A. Decq, Brussels, 1853.

Ware, Martin, jun. Handy Book of Sanitary Law. 12mo. stiff wrapper. Bell & Daldy, 1866.

Warnings to Householders; 130 Hints and Precautions concerning Safety, Health, and Comforts in Our Dwellings. 8vo. sewed. Vizetelly & Co.

Water and Water-Supply. *See Works on* HYDROSTATICS, HYDR [illegible] s, &c.

See also Ward, F. O. (above).

Westhall, C. Modern Method of Training for Running, Walking, &c. 18mo. cloth, limp. S. O. Beeton.

Wilson, A. Manual of Health Science. fcp. 8vo. cloth. Longmans & Co., 1885.

Wilson, Erasmus. On Food; as a means of Prevention of Disease. 2nd edition. 12mo. stitched. J. Churchill & Sons, 1865.

Wilson, Dr. G. Researches on Colour Blindness. With a Supplement on the Danger attending the Present System of Railway and Marine Coloured Signals. 8vo. cloth. Sutherland & Cox, Edinburgh, 1855.

——— Handbook of Hygiene and Sanitary Science. 5th edition. post 8vo. cloth. J. & A. Churchill, 1883.

Willoughby, E. F. Dietetics; or, the Nature, Functions, and Composition of Food. fcp. 8vo. cloth. W. Collins, Sons, & Co.

——— Hygiene: its Principles as applied to Public Health. post 8vo. cloth. (Advanced Science Series.) W. Collins, Sons, & Co.

Winslow, F. On the Obscure Diseases of the Brain, and Disorders of the Mind. 4th edition, revised. post 8vo. cloth. J. Churchill & Sons, 1868.

Wood, H. C. Fever; a Study in Morbid and Normal Physiology. (Smithsonian Contributions to Knowledge. Vol. 23.) *See* **Transactions** —WASHINGTON.

Wright, C. E. G. School Cookery Book. fcp. 8vo. cloth. Macmillan & Co., 1879.

Youmans, E. L. Hand-Book of Household Science. A Popular Account of Heat, Light, Air, Aliment, and Cleansing, in their Scientific Principles and Domestic Applications. With Illustrative Diagrams. crown 8vo. cloth. D. Appleton & Co., New York, 1860.

Zeitschrift für Hygiene. Herausgegeben von Dr. R. Koch und Dr. C. Flügge. *See* **Journals** (CATALOGUE OF SCIENTIFIC PERIODICALS).

Zerffi, Prof. G. G. Spiritualism and Animal Magnetism. A Treatise on Dreams, Second Sight, Somnambulism, Magnetic Sleep, Spiritual Manifestations, Hallucinations, and Spectral Visions. crown 8vo. cloth. R. Hardwicke, 1871.

Zippel, H. Ausländische Handels- und Nährpflanzen. *See Works on* BOTANY (*Foreign*).

Zeitschrift für Parasitenkunde. *See* **Journals** (CATALOGUE OF SCIENTIFIC PERIODICALS).

Zeitschrift für Schulgesundheitspflege. *See* **Journals** (CATALOGUE OF SCIENTIFIC PERIODICALS).

[*At the Bethnal Green Branch of this Museum there is a Collection (formed in* 1857) *illustrating Foods, their Classifications, Adulterations, with Chemical Analyses, &c. Several Works on this subject have been published by the Science and Art Department. See separate List at end.*]

PART VIII.

WORKS OF REFERENCE.

I.—ENCYCLOPÆDIAS, DIRECTORIES, CALENDARS, &c.

⁎ Encyclopædias, &c., relating to Special Subjects, e.g. Watts's Dictionary of Chemistry, Fremy's Encyclopédie Chimique, Baillon's Dictionnaire de Botanique, &c., will be found in their respective divisions.*

Allibone, S. A. A Critical Dictionary of English Literature, and British and American Authors, Living and Deceased, from the Earliest Accounts to the Latter Half of the Nineteenth Century. 3 vols. imp. 8vo. cloth. Trübner & Co., 1859–71.

American Cyclopædia, The New, a Popular Dictionary of General Knowledge. Edited by George Ripley and Charles A. Dana. 16 vols. imperial 8vo. cloth. D. Appleton & Co., New York, 1860–63.

Annual Register (Dodsley's). Complete set from its commencement, 1758, to 1870; with Index 1758 to 1819. 114 vols. 8vo. half russia. J. Dodsley.

——— ——— New Series. 1871 and onwards. 8vo. cloth. Rivingtons.

Appleton's Cyclopædia of American Biography. Edited by J. G. Wilson and J. Fiske. 6 vols. imp. 8vo. cloth. D. Appleton & Co., New York, 1887–9.

Army List, The Official, for the current quarter. royal 8vo. cloth. And Monthly for current date. fcp. 8vo. sewed. H.M. Stationery Office.

Art (L') de Vérifier les Dates des Faits Historiques, des Chartes, des Chroniques, et autres Anciens Monumens depuis la Naissance de Notre-Seigneur. By a Benedictine Monk of the Congregation of St. Maur. 3rd edition. 3 vols. folio. calf. Paris, 1783–7.

Balfour, E. Cyclopædia of India and of Eastern and Southern Asia, Commercial, Industrial, and Scientific; Products of the Mineral, Vegetable, and Animal Kingdoms, Useful Arts and Manufactures. By Surgeon-General E. Balfour. 3rd edition. 3 vols. royal 8vo. cloth. B. Quaritch, 1885.

Beleze, G. Dictionnaire Universel de la Vie Pratique à la Ville et à la Campagne. 3rd edition. royal 8vo. calf. Hachette & Co., 1867.

Blackie's Modern Cyclopædia of Universal Information. Edited by C. Annandale. 8 vols. crown 8vo. cloth. Blackie & Son, 1889–90.

Blair, Dr. Chronological and Historical Tables. royal 8vo. half roan. Longmans & Co., 1851.

Bohn, H. G. Polyglot of Foreign Proverbs, comprising French, Italian, German, Dutch, Spanish, Portuguese, and Danish, with English Translations, and a General Index. 12mo. cloth. (Bohn's Antiquarian Library.) Bell & Daldy, 1867.

Bond, John J. Handy Book of Rules and Tables for Verifying Dates of Historical Events, and of Public and Private Documents; giving Tables of Regnal Years of English Sovereigns, with leading dates from the Conquest to the Present Time, 1066—1866. crown 8vo. cloth. Bell & Daldy, 1866.

Bouillet, M. N. Dictionnaire Universel des Sciences, des Lettres, et des Arts. New edition, revised and corrected. royal 8vo. calf. Hachette & Co., 1869.

Brande, W. T. A Dictionary of Science, Literature, and Art. 3rd edition. 8vo. cloth. 1853.

——— ——— New edition, by Rev. G. W. Cox. 3 vols. 8vo. half calf. Longmans & Co., 1866–7.

Brewer, Dr. E. C. Dictionary of Phrase and Fable, giving the Derivation, Source, or Origin, of Common Phrases, Allusions, &c. 3rd edition. crown 8vo. half roan. Cassell, Petter, & Galpin.

British Almanack (The) and Companion, 1864 and onwards. 12mo. cloth. Stationers' Company.

British Encyclopædia. By William Nicholson. Engravings by Lowry and Scott. 6 vols. 8vo. calf. London, 1809.

Brockhaus' Conversations-Lexikon. 12th edition. 15 vols. imp. 8vo. half bound. F. A. Brockhaus, Leipzig, 1875–79.

Calendars of Universities, &c. for current year:—

- Aberdeen University.
- Birkbeck Institution.
- Bradford Technical College.
- Cambridge University.
- City of London College.
- Coimbra, Universidade de.
- College of Preceptors.

Calendars of Universities—*cont.*
- Cooper's Hill Royal Indian Engineering College.
- Dublin University; and Examination Papers.
- Durham University.
- Edinburgh University.
- Glasgow and West of Scotland Technical College.
- Glasgow University.
- Japan, Imperial University of.
- King's College (London).
- London University.
- Mason's Science College (Birmingham).
- Owens College (Manchester).
- Oxford University.
- Queen's College (London).
- Royal University of Ireland; Reports; Examination Papers.
- St. Andrew's University; including L.L.A. and Local Examinations.
- Science and Art Department.
- Sydney, New South Wales, University.
- Sydney Technical College.
- Trinity College (London).
- University College (Bristol).
- University College (London).
- University College (Nottingham).
- University College of South Wales and Monmouth (Cardiff).
- Victoria University (Manchester).
- Yorkshire College (Leeds).

Cape of Good Hope Civil Service List, 1889. 8vo. cloth. Cape Town, 1889.

Cassell's Biographical Dictionary. Containing original Memoirs of the Most Eminent Men and Women of all Ages and Countries. 4to. cloth. Cassell, Petter, & Galpin.

Cates, W. L. R. A Dictionary of General Biography, with a Classified and Chronological Index of the Principal Names. 8vo. cloth. Longmans & Co., 1867.

Chambers, E., and **Rees,** A. Cyclopædia; or, an universal Dictionary of Arts and Sciences. With Supplement by Abraham Rees. 5 vols. folio. calf. London, 1779–91.

Chambers's Encyclopædia; a Dictionary of Universal Knowledge for the People, illustrated with maps and wood engravings. 10 vols. imp. 8vo. cloth. 1860–68.

——— ——— Revised edition. 10 vols. imp. 8vo. half calf. 1874.

——— ——— New edition. Vol. 1 and onwards. imp. 8vo. cloth. W. & R. Chambers, 1888, &c.

——— Information for the People. 5th edition. 2 vols. imp. 8vo. half morocco. W. & R. Chambers, 1874–5.

Chambers's Book of Days, a Miscellany of Popular Antiquities in connection with the Calendar. Edited by Robert Chambers. 2 vols. imp. 8vo. half morocco. W. & R. Chambers, 1864.

——— Cyclopædia of English Literature; a History of British Authors, from the Earliest to the Present Times. 2 vols. imp. 8vo. half calf. W. & R. Chambers, 1856.

Chéruel, A. Dictionnaire Historique des Institutions, Mœurs, et Coutumes de la France. 2 vols. 2nd edition. 12mo. sewed. Hachette & Co., 1865.

Clergy List for current year. 8vo. cloth. Kelly & Co.

Clinton, H. F. Fasti Hellenici. The Civil and Literary Chronology of Greece, from the Earliest Accounts to the Death of Augustus. 3 vols. 4to. cloth. 1834–41.

——— Fasti Romani. The Civil and Literary Chronology of Rome and Constantinople, from the Death of Augustus to the Death of Heraclius. 2 vols. 4to. cloth. University Press, Oxford, 1845–50.

Colonial Year Book for 1890. By A. J. R. Trendell. With Introduction by J. R. Seeley. 8vo. cloth. S. Low & Co., 1890.

Cooley's Cyclopædia of Practical Receipts, Processes, and Collateral Information in the Arts, Manufactures, Professions, and Trades, including Medicine, Pharmacy, Hygiene, and Domestic Economy. 6th edition, revised and greatly enlarged by R. V. Tuson. 2 vols. 8vo. cloth. J. & A. Churchill, 1880.

Cooper, T. New Biographical Dictionary. post 8vo. cloth. G. Bell & Sons, 1873.

Crockford's Clerical Directory for current year. imp. 8vo. cloth. H. Cox, Wellington Street.

Cruden's Concordance to the Old and New Testament, to which is added, a Concordance to the Apocrypha. 13th edition. 4to. cloth. (*C. C. E. L., No.* 2367.) London, 1859.

Cushing, W. Initials and Pseudonyms. A Dictionary of Literary Disguises. royal 8vo. cloth. S. Low & Co., 1886.

Daremberg and Saglio. Dictionnaire des Antiquités Grecques et Romaines. Part 1 and onwards. 4to. sewed. Hachette & Co., 1874, &c.

Darling, J. Cyclopædia Bibliographica: a Library Manual of Theological and General Literature. "Authors." super royal 8vo. cloth. 1854.

Darling, J. Cyclopædia Bibliographica: a Library Manual of Theological and General Literature. "Subjects, Holy Scriptures." super royal 8vo. cloth. J. Darling, 1859.

Deschanel, A. Privat, et **Focillon,** Ad. Dictionnaire Général des Sciences Théoriques et Appliquées. 2 vols. imp. 8vo. half calf.
Tandou & Co., Paris, &c., 1864–69.

Dictionary (A New) of Quotations from the Greek, Latin, and Modern Languages. post 8vo. cloth.
J. F. Shaw, 1858.

Dictionary of National Biography. Edited by Leslie Stephen and Sidney Lee. Vol. 1 and onwards. 8vo. half morocco.
Smith, Elder, & Co., 1885, &c.

Dictionnaire des Sciences Philosophiques. Prepared under the direction of Ad. Franck. 2nd edition. royal 8vo. half morocco.
Hachette & Co., 1875.

Encyclopædia Americana. A Supplemental Dictionary of Arts, Sciences, and General Literature. 4 vols. 4to. cloth.
J. M. Stoddart, New York, 1883–89.

Encyclopædia Britannica; or, a Dictionary of Arts and Sciences and General Literature. 7th edition. 21 vols. 4to. calf. London, 1842.

——— ——— 8th edition. 21 vols. 4to. half roan. With Supplement to Vol. 1, and Index. A. & C. Black, 1853–60.

——— ——— 9th edition. 24 vols. and Index. 4to. half calf.
A. &. C. Black, 1875–89.

Encyclopædia Metropolitana. 25 vols., with 3 vols. of Plates and General Index. 4to. half calf.
Vols. 1 and 2.—Pure Sciences.
Vols. 3-8 —Mixed Sciences.
Vols. 9–13.—History and Biography.
Vols. 14–25.—Miscellaneous and Lexicographical. London, 1845.

Encyclopédie; ou Dictionnaire universel raisonné des connaissances humaines; mis en ordre par M. de Felice. 42 vols. 4to. calf. 1770–75.
Supplément. 6 vols. 4to. calf. 1775–76.
Planches. 10 vols. 4to. calf.
Yverdon, 1775–80.

Encyklopædie der Naturwissenschaften:—
Botanik. *See* Schenk, p. 157.
Chemie. *See* Ladenburg, p. 301.
Mathematik. *See* Schlömilch, p. 29.
Mineralogie, Geologie, &c. *See* Kenngott, &c., p. 121.
Pharmakognosie des Pflanzenreichs. *See* Wittstein, p. 159.
Physik. *See* Winkelmann, p. 356.
Zoologie, Anthropologie, &c. *See* Jäger, &c., p. 252.

English Catalogue of Books, January 1835 and onwards. Compiled by Sampson Low. royal 8vo. half morocco and sewed.
S. Low & Co., 1864, &c.

English Cyclopædia, The. Conducted by C. Knight. 23 vols. 4to. cloth:—
Biography, 6 vols.
Arts and Sciences, 8 vols.
Geography, 4 vols.
Natural History, 4 vols.
Index.
Bradbury & Evans, 1856–62.

Every Man's Own Lawyer. A Handy Book of the Principles of Law and Equity; comprising the Rights and Wrongs of Individuals. By a Barrister. 28th edition. post 8vo. cloth.
C. Lockwood & Son, 1891.

Familiar Quotations, Handbook of; chiefly from English Authors. 3rd edition. fcp. 8vo. cloth.
J. Murray, 1859.
See also Friswell, J. H., Henderson, A. (Latin), and Truths Illustrated.

Fétis, F. J. Histoire Générale de la Musique, depuis les Temps les plus Anciens jusqu'à Nos Jours. 5 vols. royal 8vo. half morocco. 1869–76.

——— Biographie Universelle des Musiciens et Bibliographie Générale de la Musique. 2nd edition. 8 vols., in 4. half morocco.
Firmin-Didot & Co., Paris, 1866–73.

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PART IX.

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13. Cork, 1843.
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39. Exeter, 1869.
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